

Abstract

Durability of a pair of inward flange portions 4b and 4c formed on both ends of a shell 1c is ensured while maintaining load capacity, irrespective of a thrust load applied from each needle 2a. Inside surfaces 10a and 10b of both inward flange portions 4b and 4c are formed as inclined surfaces inclined in a direction where a distance between the surfaces increases toward the radial inward direction. Each of both axial end surfaces of the needle 2a is constructed from a beveled portion 8 on an outer peripheral edge and a flat surface portion 9. The structure prevents a large moment load from being applied to base end portions of the inward flange portions 4b (4c) even when end surfaces of the needles 2a are abutted against an inside surface 10a (10b) of an inward flange portion 4b (4c) by a thrust load.